

CLAIMS

1. A text messaging system for the encryption of at least one text message sent to a wireless terminal equipment, the text message having an information data field and a text data field,
5 the text messaging system comprising:

means for storing an equipment identification number uniquely assigned to the wireless terminal equipment;

means coupled to the equipment identification number storing means for encrypting the text data field content using the
10 equipment identification number assigned to the wireless terminal equipment as the shared key; and

means for setting an encryption identifier in the information data field of the at least one text message.

15 2. The system of claim 1 wherein the at least one text message is a Short Message Service (SMS) message and said assigned equipment identification number is the International Mobile Equipment Identity (IMEI) number of said wireless terminal equipment.

20 3. The system of claim 1 wherein the text data field of the text message comprises configuration commands to remotely manage the wireless terminal equipment.

4. The system of claim 1 wherein the information data field of the text message further comprises a header part and a body part, and wherein the encryption identifier is set in the body part of the information data field.

5. The system of claim 2 wherein the encryption identifier is set in an Information Element group of the SMS message.

6. The system of claim 1 wherein said wireless terminal equipment is an Short Message Service (SMS) receiving mobile device and said at least one text message is carried over a wireless network.

7. The system of claim 1 wherein said wireless terminal equipment comprises means for storing a personal equipment identification number, and further comprising:

means for receiving the encrypted at least one text message;

means for determining if the received encrypted at least one text message contains an equipment identification number as a shared key encryption; and

means for decrypting the received encrypted at least one text message using the personal equipment identification number of said wireless terminal equipment.

8. The system of claim 7 further comprising means coupled to the decrypting means for processing or rejecting the decrypted at least one text message.

9. The system of claim 1 wherein the means for generating an encrypted at least one text message further comprising means for processing an encryption algorithm to compute a bit string using said assigned equipment identification number as the shared key and the text data field content.

10. The system of claim 7 wherein the means for decrypting the received encrypted at least one text message further comprising means for processing a decryption algorithm using said personal equipment identification number as the shared key and the received encrypted at least one text message content.

11. A method for authenticating a text message sent by a text messaging system to a wireless terminal equipment having means for storing a personal equipment identification number, the text messaging system comprising means for storing an equipment
5 identification number uniquely assigned to the wireless terminal equipment, and wherein the text message having an information data field and a text data field, the method comprising the steps of:

at the text messaging system:

10 encrypting the text data field content by using the equipment identification number assigned to the wireless terminal equipment as the shared key;

setting an encryption identifier in the information data field of the at least one text message; and

15 sending the encrypted at least one text message to the wireless terminal equipment;

at the wireless terminal equipment:

receiving the encrypted at least one text message;

20 determining if the received encrypted at least one text message contains an equipment identification number as a shared key encryption; and

decrypting the received encrypted at least one text message using the personal equipment identification number of said wireless terminal equipment as a shared key.

12. The method of claim 11 further comprising after the receiving step, the step of determining if the encrypted at least one text message contains configuration commands to remotely activate the wireless terminal equipment.

5 13. The method of claim 11 further comprising after the decrypting step, the step of processing or rejecting the decrypted at least one text message upon the decryption result.

10 14. The method of claim 11 wherein the at least one text message is a Short Message Service (SMS) message, and the assigned equipment identification number is the International Mobile Equipment Identity (IMEI) number of the wireless terminal equipment.